# ON FOUR NEW AMERICAN CHILOPODS 

BY RALPH V. CHAMBERLIN<br>University of Utah, Salt Lake City

The new species here described were noted while identifying several small collections submitted to me by Dr. A. M. Woodbury, from Utah, P. W. Fattig, from Georgia, and Dr. J. M. Linsdale from California. The types are retained at present in the author's collection.

## Schendylidae

The new species described below is the first of the genus to become known from the western United States. It is essentially a northern genus, being represented by two species from the northeastern states and by five in Alaska and northeastern Asia. Its extension down the western mountains into the United States is natural. The known species of the genus may be separated by means of the following key.

## Key to Species of Escaryus

1. Claw of anal legs as large as those of the penult pair.............. 2

- Claw of anal legs small in comparison with those of other legs.. 4

2. Last sternite as broad as long narrowed caudad; Anal coxae with only 5 or 6 pores (Alaska)
E. albus Cook

- Last sternite narrow, relatively long, scarcely narrowed; coxal pores more numerous (Northeastern United States) ................. 3

3. Yellowish brown in color; 41 pairs of legs..E. urbicus (Meinert)

- Waxy white; 49 pairs of legs..................................... liber Cook

4. Anal pores present........................................................................ 5

- Anal pores absent....................................................................... 6

5. Pairs of legs 47; last ventral plate narrow, with sides nearly parallel (Alaska)........................................... delus Chamberlin

- Pairs of legs 43; last ventral plate broad, conspicuously narrowed caudad (Utah) ............E. monticolens Chamberlin, n. sp.

6. Pairs of legs 33 (Alaska)......................... paucipes Chamberlin

- Pairs of legs 49-51 7

7. Syncoxite of first maxillae with long membranous lappets; lateral teeth of labrum with long slender tips.....E. sibiricus Cook

- Syncoxite of first maxillae without lappets; all teeth of labrum short and stout $\qquad$ E. japonicus Attems

Escaryus monticolens Chamberlin, new species
Apparently related to the Alaskan E. albus Cook. It differs in general appearance in being yellow, with head and prehensors
darker, instead of being a waxy, translucent white. It differs in the more numerous soxal pores these numbering about 18 on each side instead of 5-6. Last ventral plate trapeziform, about equal in length to the anterior width. Claws of the anal legs somewhat smaller than those of the penult legs.

Cephalic plate broadest anteriorly, considerably overlapping the basal plate the exposed portion of which is short. Clypeus wholly lacking nonerelate fields. Labrum evenly and moderately incurved, the teeth all stout and subconical, 15 in number. First maxillae with palpi having well developed lappets. Coxosternum of second maxillae with anterior border deeply notched at the middle, the median area less sclerotized, membranous. Mandible with teeth in three blocks; e.g., 3, 3, 4.

Anal pores present.
Number of pairs of legs, 43.
Length, 18 mm .
Locality. Utah : Mill Creek Canyon. One female dug up in soil at an elevation of about $7,500 \mathrm{ft}$. A. M. Woodbury, collector.

## Lithobiidae

Nadabius cherokeenus Chamberlin, new species
Dorsum brown or light chestnut. Legs proximally pale, but with the fourth and fifth joints brown and the tarsus yellow. Antennae brown.

The antennae composed of the usual 20 articles which are of moderate length. Ocelli in 4 longitudinal series; thus, $1+5,5,4,3$.

Prosternal teeth 22 ; the median incision acute.
None of the dorsal plates produced.
Coxal pores, small and circular; 2, 3, 3, 3 .
Ventral spines of first legs, $0,0,1,2,1$ (2) ; dorsal, $0,0,0,1,1$. Ventral spines of penult legs, $0,1,3,2,1$; dorsal, $1,0,2,1,0$; claws 2 . Ventral spines of anal legs, $0,1,3,1,0$; dorsal, $1,0,2,0,0$; claw single. Last two pairs of coxae laterally armed.

The anal legs of the male with the usual subdorsal crest at distal end of the fifth joint, its form and relations as shown in the accompanying figure. Length, 10 mm .

Locality. Georgia: Atlanta. A male taken February 17, 1946, by P. W. Fattig.

Distinguished from all other known species excepting $N$. eremites in having the dorsal spines of the anal legs $1,0,2,0,0$ and those of the penult $1,0,2,1,0$.

It is separated from $N$. eremites chiefly on the basis of having the last two pairs of coxae laterally armed, whereas they are unarmed in eremites, and of having the ocelli in 4 series instead of in 3.

## Arebius sequens Chamberlin, new species

A species agreeing with $A$. crenius and differing from $A$. dolius, to which it runs in the key, in having the claw of the female genital forceps distinctly tripartite, the lateral lobes smaller than the median which, however, is short and relatively broad. The basal spines of the genital forceps slender, subcylindrical but narrowest at middle, the acuminate apex short. It differs from crenius in having the dorsal spines of the 12th and 13th legs $1,0,3,1,1$ instead of $1,0,3,2,2$. It also differs in the more numerous ocelli arranged in three series instead of in two; e.g., $15,4,3$.

Length, 10 mm .
Locality. California: Monterey County, Hastings Reservation. A male and female taken June 10, 1943, by Dr. J. M. Linsdale.


Nadabius cherokeenus Chamberlin, n. sp. Fifth segment of left anal leg, subdorsal view.

Arebius petrovius Chamberlin, new species
In the author's key this form runs out to A. diplonyx of the Santa Barbara region. It is like that species in having two claws on the anal leg, but the supplementary claw is very small instead of being rather large and distinct. It is also like that species in having the claw of the female genital forceps tripartite; the basal spines, however, are acuminate from base instead of being cylindrical to an acuminate apical part.

The ventral spines of the penult legs are $0,1,3,3,1$ instead of $0,1,3,3,2$, the dorsal being $1,0,3,1,1$. Dorsal spines of anal legs $1,0,3,1,0$, the ventral $0,1,3,3,0$. Last two pairs of coxae laterally armed.

The ocelli are fewer and are in two series instead of in three; e. g , $1+3,2$ or 3,3 .

Length, $7-7.5 \mathrm{~mm}$., thus being smaller than A. diplonyx which is 8 to 8.5 mm . long.

Locality. California: Monterey County, Finch Creek. Four specimens under a rock, taken March 24, 1945, by Dr. J. M. Linsdale.

